

ABSTRACT OF THE DISCLOSURE

A protective system or apparatus for use in vascular procedures includes a tubular guidewire, a control cable 5 slideable within the tubular guidewire, and a sheathless filter. The control cable is attached to a distal end of the sheathless filter and the tubular guidewire is attached to a proximal end of the sheathless filter. Selective displacement of the control cable radially expands the sheathless filter to create a proximal exterior convex primary filter surface that 10 is positionable downstream from a site of a vascular procedure. The sheathless filter also presents a distal interior concave secondary filter surface. Preferably, the sheathless filter is constructed of a braided wire framework in the form of a tube which is co-braided with a filter mesh 15 formed of polymer fibers or nitinol wires of the same diameter or of varying diameters that produce a "soft" filter surface for contacting a blood vessel.